# **ILYA FIGOTIN**

3918 Burberry Drive South, Apt. #77 Lafayette, IN 47905 (513) 266 - 1865 ifigotin@cs.purdue.edu US Citizen

#### **OBJECTIVE**

To obtain a full time position within a company or research laboratory in the field of Computer Science

### PROFESSIONAL EXPERIENCE

# Purdue University, West Lafayette, IN

January 2005 - Present

Research Assistant

- Member of Indiana Center for Database Systems (ICDS)
- Member of the Center for Education and Research in Information Assurance and Security (CERIAS)
- Involved in the NSF project on Privacy Preserving Data Integration and Sharing
- Conducted and designed set of experiments on embedding strings in vector space to prove feasibility of relevant methods
- Implemented cryptographic algorithms and protocols based on research papers for testing and comparing the efficiency of several private set intersection protocols
- Maintained Oracle and MySQL databases for other database related projects in ICDS

# **Cardinal Solutions Group, Cincinnati, OH**

February 2004 – January 2005

Associate Consultant II

- Designed and developed a set of reporting tools to analyze data of large volumes;
   the reports helped to identify and fix data discrepancy issues
- Implemented JSP pages for data presentation and manipulation in comprehensive web application with WebSphere
- Supported Production Environment on AIX UNIX
- Implemented web services components with the help of Apache Axis

# LexisNexis, Miamisburg, OH

March 2003 – February 2004

Software Engineer

- Developed an advanced tool in Java for comparing and merging XML documents. The tool was used in indexing process.
- Designed and developed utility applications that helped the developers in testing various tasks related to indexing
- Redesigned and migrated indexing modules written in C++/C and PL/1 into Java

### LexisNexis, Miamisburg, OH

April 2001 - March 2003

Co-op/Software Engineer

- Developed web pages for internal project
- Developed parts of multilingual reporting tool in Java
- Developed UI components for applications

#### **EDUCATION**

Purdue University, West Lafayette, IN

M.S. in Computer Science

Expected Graduation: Dec. 2006 Current GPA: 4.0/4.0

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# Wright State University, Dayton, OH

B.S. in Computer Science

Graduated Summa Cum Laude

GPA: 4.0/4.0

March 2003

# Kharkiv National University, Khrakiv, Ukraine

September 1997 – June 2000

Major: Applied Mathematics

### **COMPUTER SKILLS**

### **Languages and Tools**

Java, RMI, JDBC, JSP, JAX, JUnit, ANT, Xerces, Log4J, C++, C, C#, SQL, XML, HTML, IBM WSAD, Eclipse IDE, ClearCase, Rational Rose, MS Visual Studio, IBM VisualAge for Java, MS Office

### **Operating systems**

Windows, Unix, Solaris, Linux

### **CLASS PROJECTS**

- Implemented operating system code for Pentium architecture (schedulers, semaphores, virtual memory with various page replacement algorithms)
- Conducted a research project investigating known Private Set Intersection Algorithms
- Modified, and investigated parts of gcc compiler implementation (worked with parse tree to implement prity-printing of the source code; and implemented liveness analysis)
- Designed and implemented a database for a small company that dealt with patients in Cincinnati area
- Developed a "forest fire" simulation program in C++, that demonstrated the concurrency of Unix processes
- Developed a simple version of Unix Shell and file system. The program allowed users to execute shell commands for creating file system, mounting a file system, and working with that system (create, delete, and move files and directories)
- Developed Graphics Editor in Motif toolkit. The drawing library was written from scratch.
   Special algorithms were used for drawing and filling the figures

### RELEVANT COURSE WORK

Simulation and Modeling, Cryptography, Introduction to Information Security, Databases, Programming Languages, Compilers, Operating Systems, Algorithms and Data Structures, Graphics, Introduction to Robotics

### **LANGUAGES**

Fluent in Russian, English and Ukrainian

#### **ACTIVITIES AND HONORS**

Member of Graduate Student Board
Outstanding Student in Computer Science Award
Phi Kappa Phi Honor Society
Golden Key International Honor Society
ACM International Collegiate Programming Contest
Dean's List, Highest Honors
Purdue University
Wright State University
2002
Content Computer Science Award
Wright State University
Wright State University